

FIG. 1

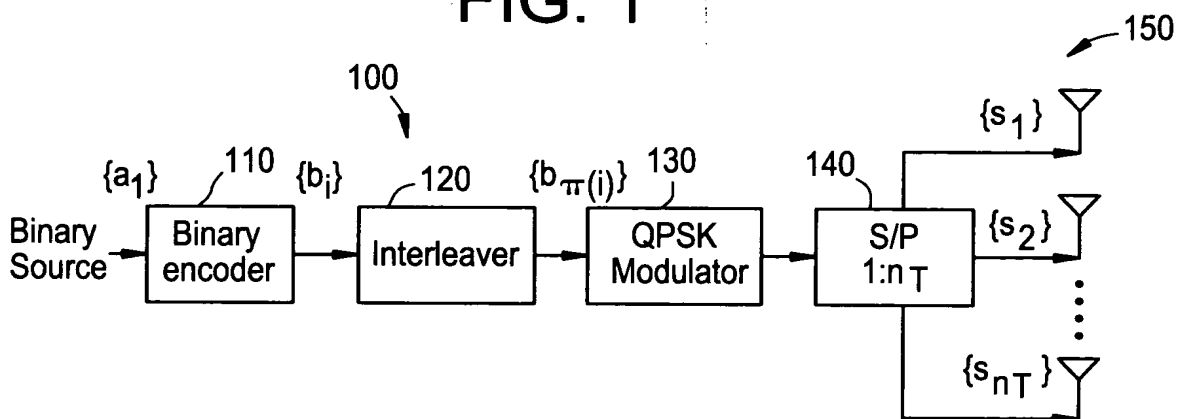


FIG. 2

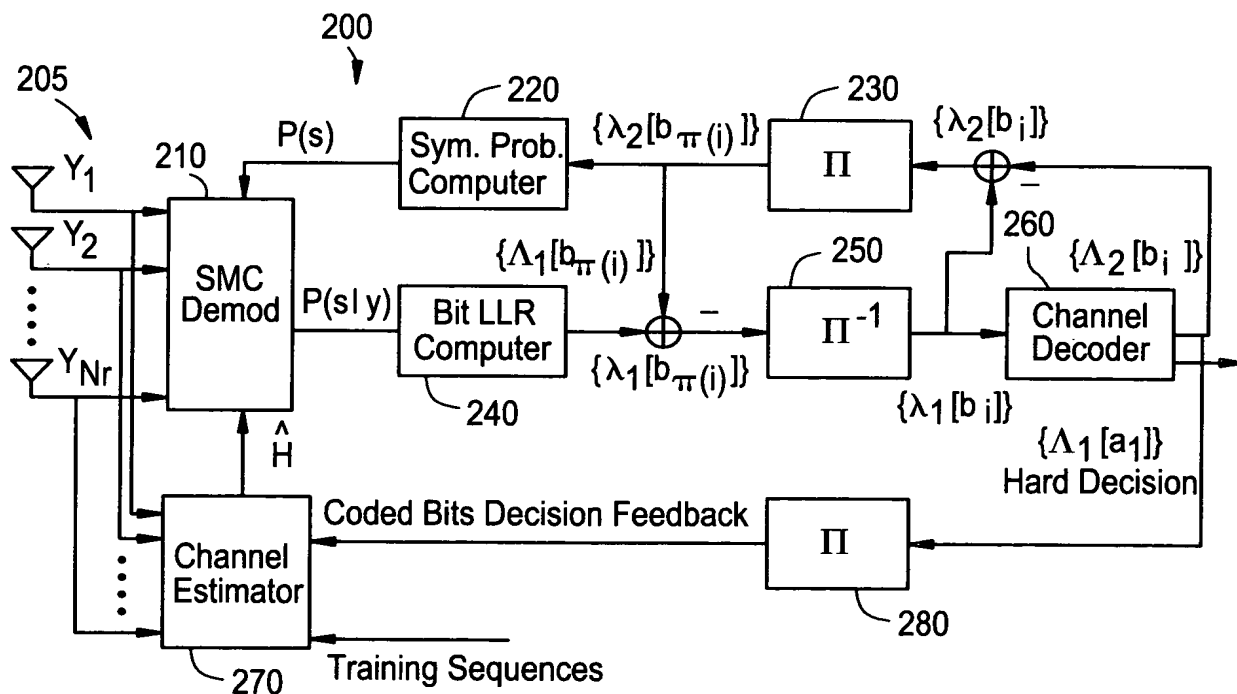


FIG. 3

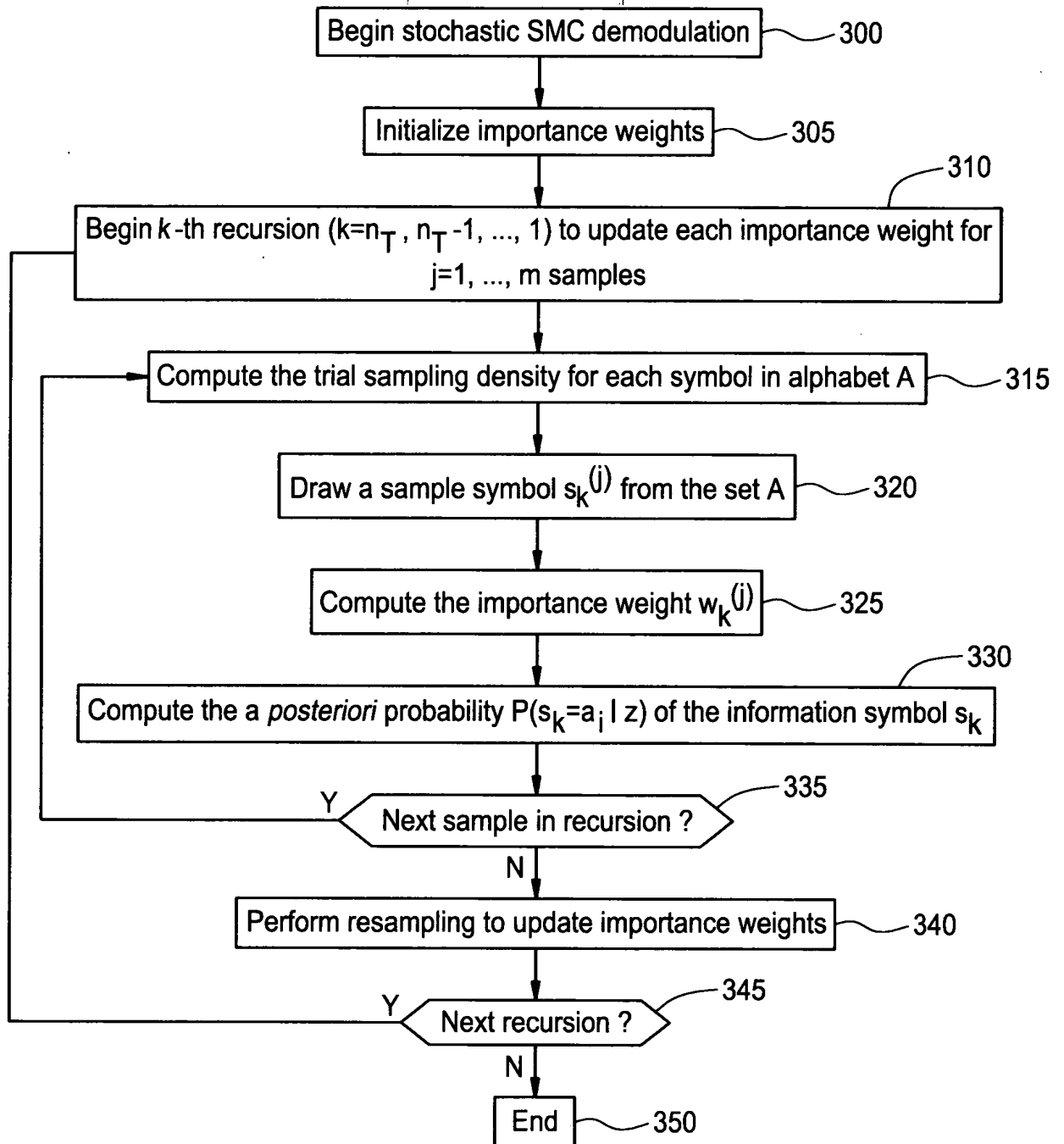


FIG. 4

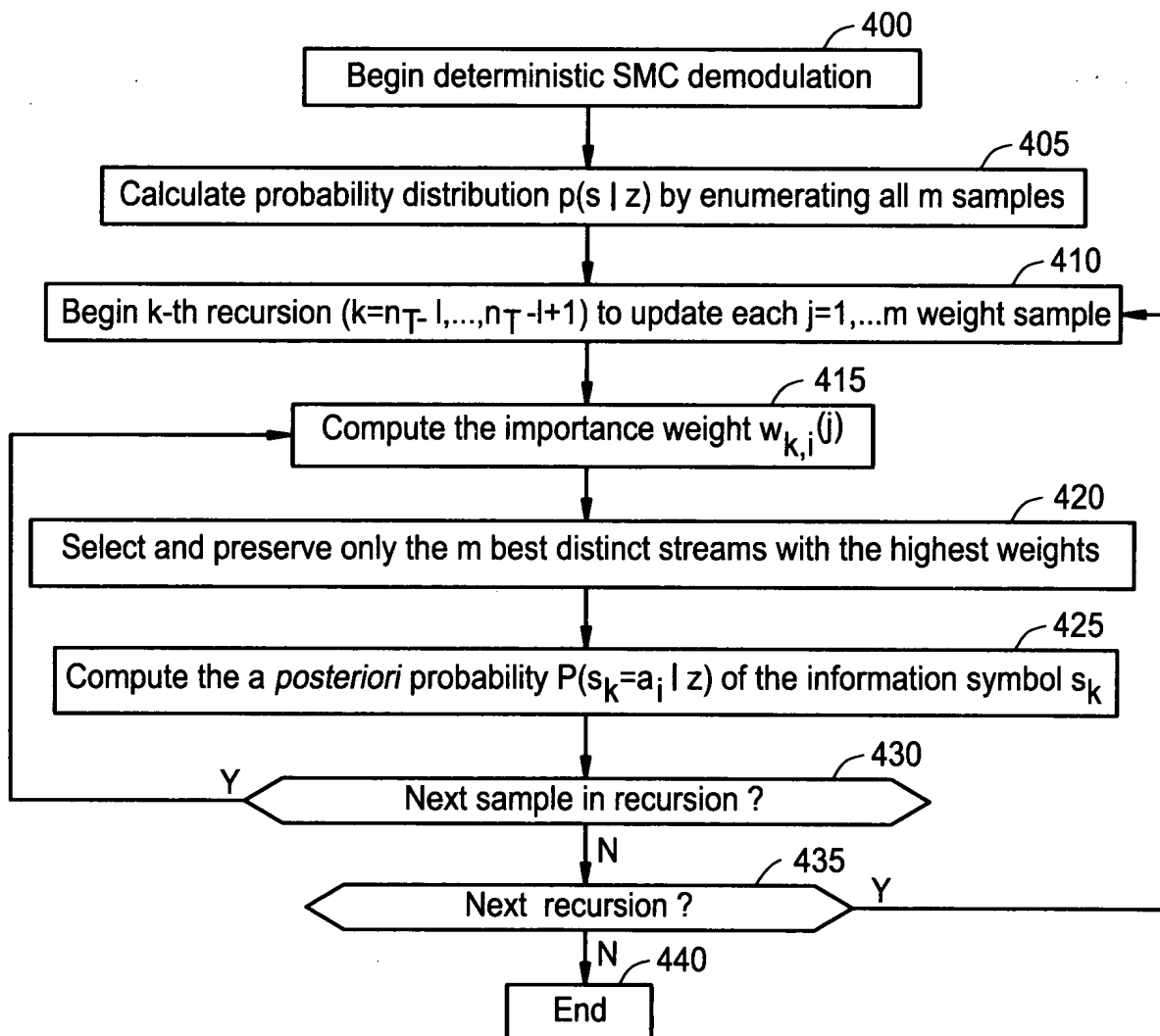
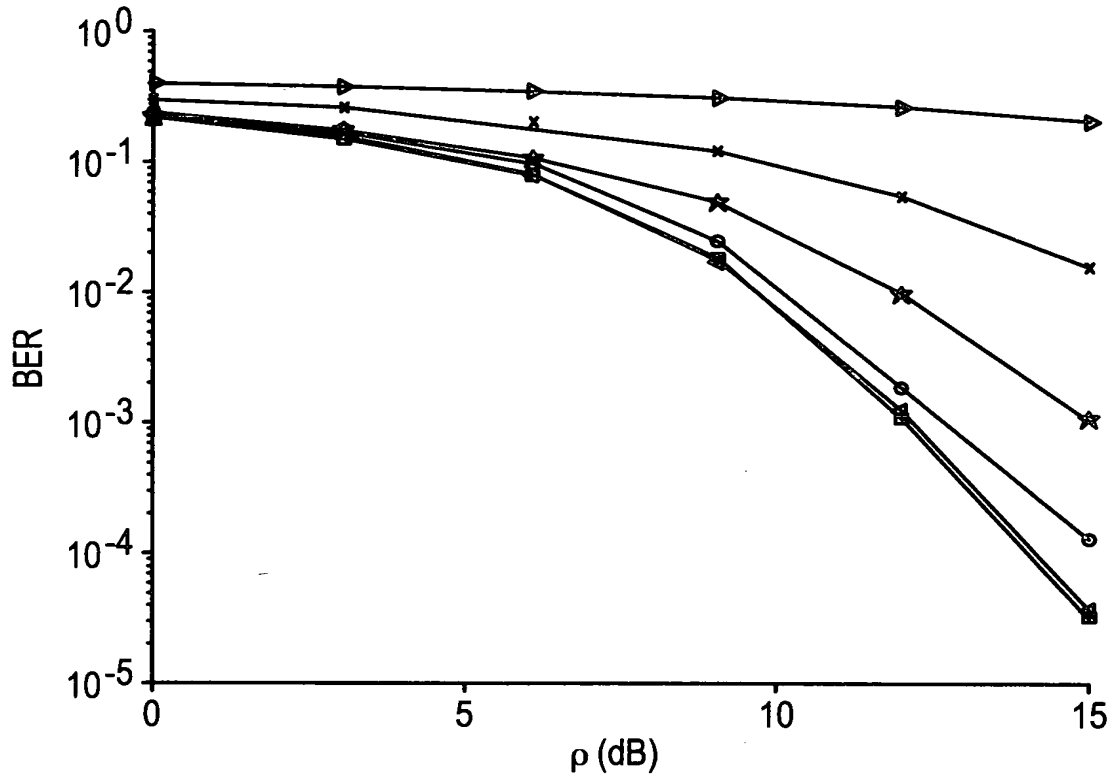


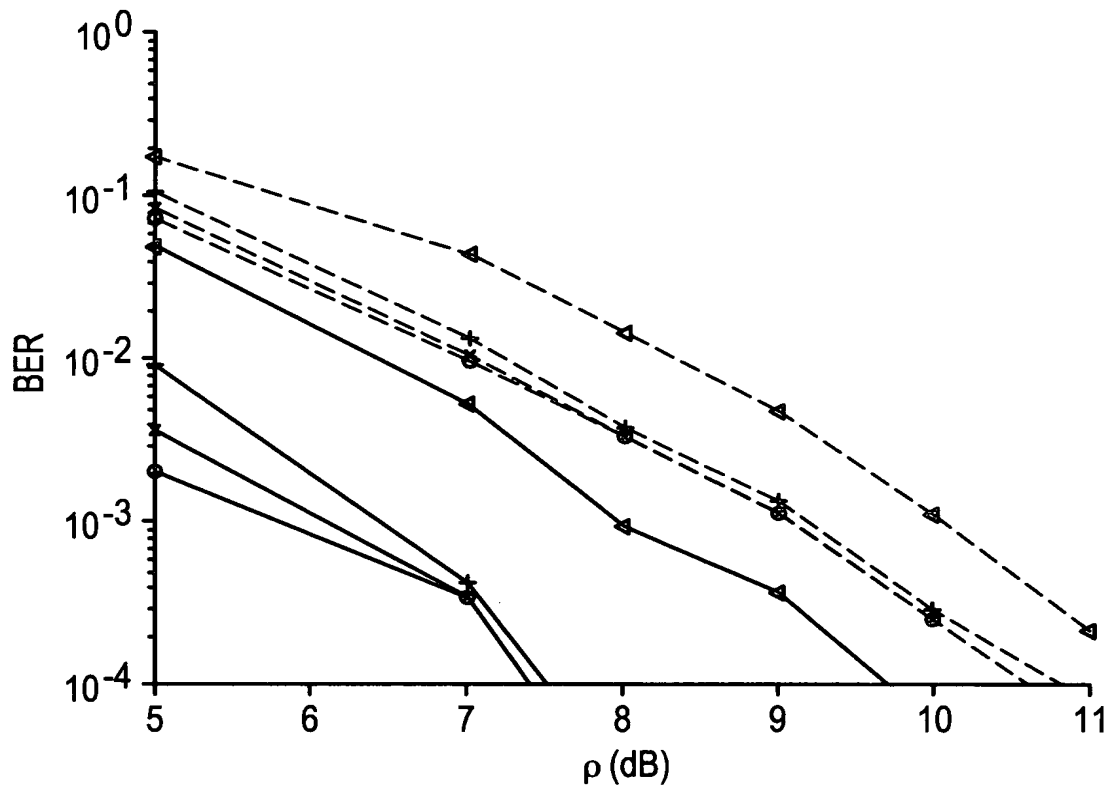
FIG. 5



- ▶ simple nulling/cancellation
- \* zero-forcing nulling/cancellation w/ordering
- ★ MMSE nulling/cancellation w/ordering
- stochastic SMC
- deterministic SMC
- ◀ sphere decoding

**FIG. 6**

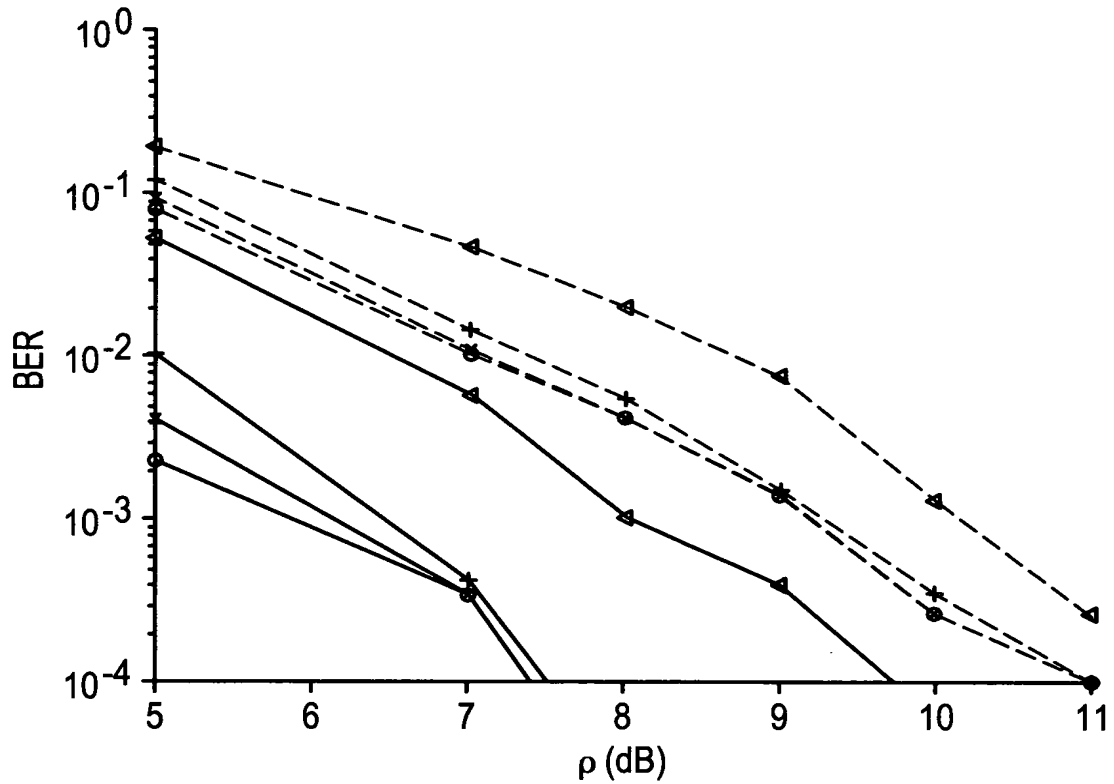
Stochastic SMC turbo receiver, pilot only



- ◁— Iter 1, ch. known
- +— Iter 2, ch. known
- \*— Iter 3, ch. known
- ◊— Iter 4, ch. known
- ◁— Iter 1, ch. est.
- +— Iter 2, ch. est.
- \*— Iter 3, ch. est.
- ◊— Iter 4, ch. est.

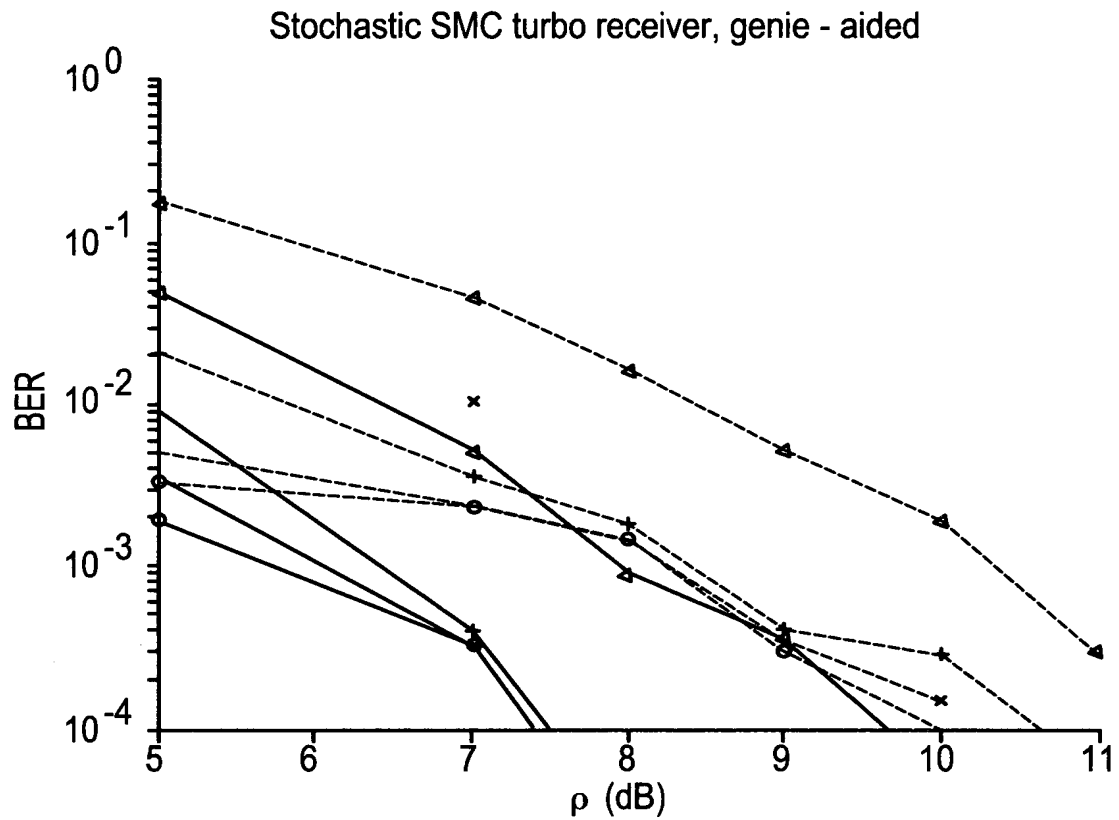
FIG. 7

Stochastic SMC turbo receiver, pilot + feedback



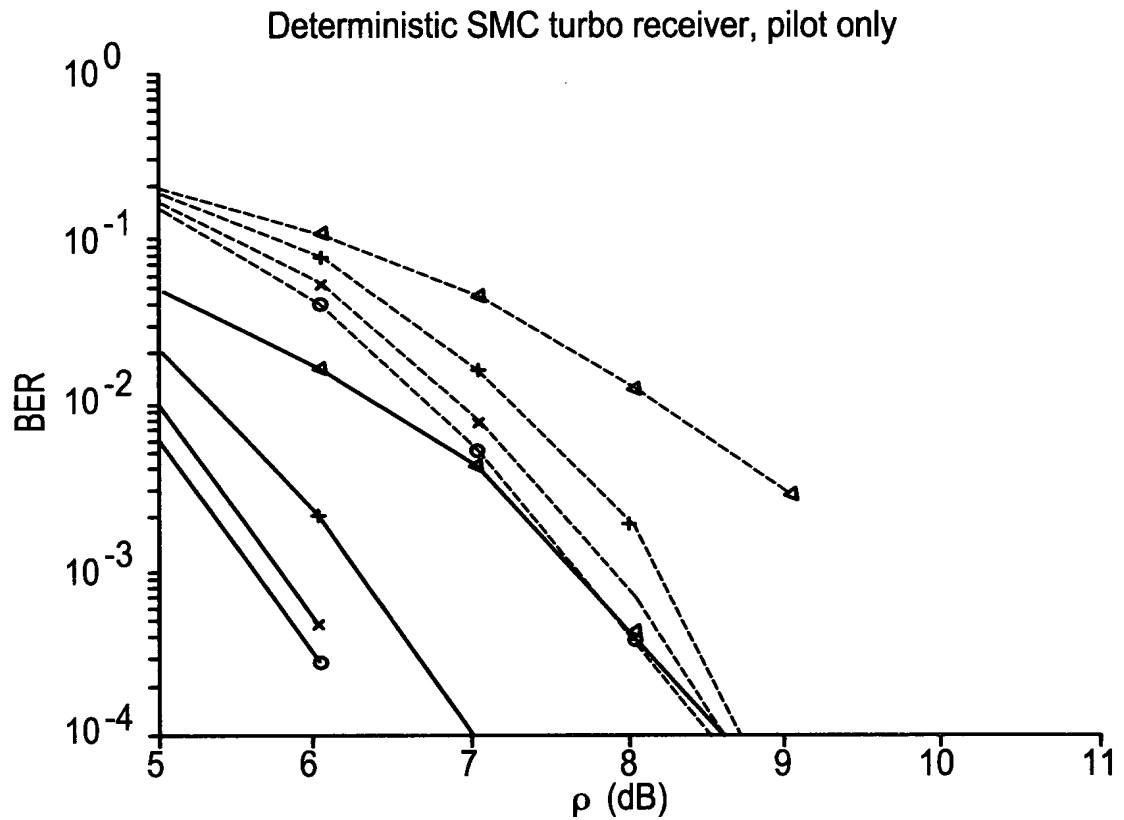
- ◁— Iter 1, ch. known
- +— Iter 2, ch. known
- \*— Iter 3, ch. known
- ◉— Iter 4, ch. known
- -◁- - Iter 1, ch. est.
- -+ - - Iter 2, ch. est.
- -\* - - Iter 3, ch. est.
- -◉- - Iter 4, ch. est.

FIG. 8



- ◄— Iter 1, ch. known
- +— Iter 2, ch. known
- \*— Iter 3, ch. known
- ◉— Iter 4, ch. known
- ◄— Iter 1, ch. est.
- +— Iter 2, ch. est.
- \*— Iter 3, ch. est.
- ◉— Iter 4, ch. est.

FIG. 9

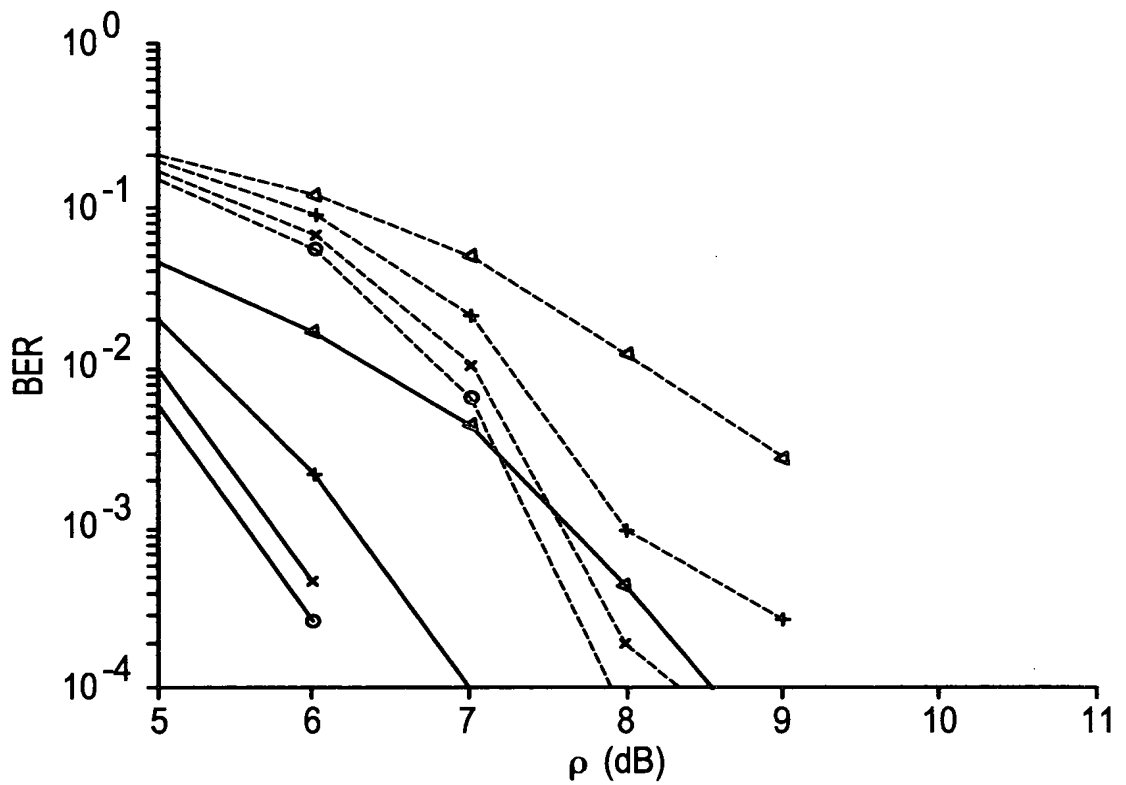


- ◁— Iter 1, ch. known
- +— Iter 2, ch. known
- \*— Iter 3, ch. known
- ◉— Iter 4, ch. known
- - ◁ - - Iter 1, ch. est.
- - + - - Iter 2, ch. est.
- - \* - - Iter 3, ch. est.
- - ◉ - - Iter 4, ch. est.



FIG. 10

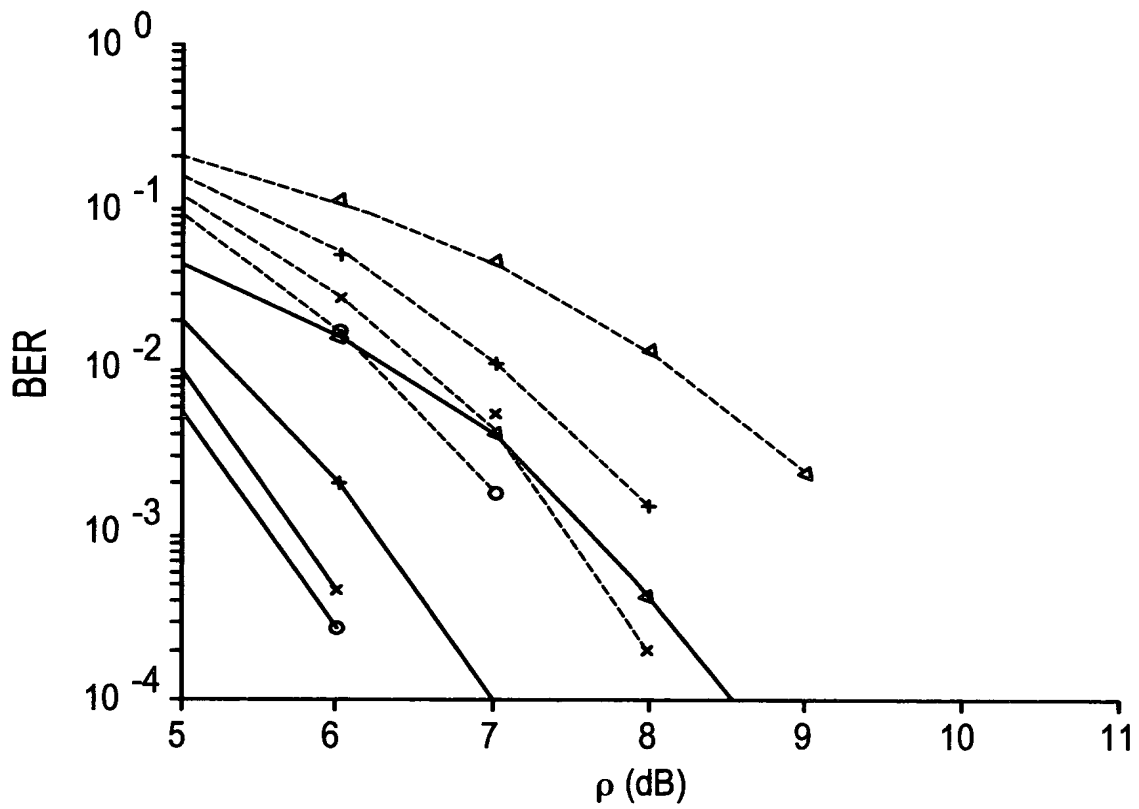
Deterministic SMC turbo receiver, pilot + feedback



- ◄— Iter 1, ch. known
- +— Iter 2, ch. known
- \*— Iter 3, ch. known
- ◉— Iter 4, ch. known
- ◄- Iter 1, ch. est.
- +- Iter 2, ch. est.
- \*- Iter 3, ch. est.
- ◉- Iter 4, ch. est.

FIG. 11

Deterministic SMC turbo receiver, genie - aided



- △— Iter 1, ch. known
- +— Iter 2, ch. known
- x— Iter 3, ch. known
- Iter 4, ch. known
- △- Iter 1, ch. est.
- +- Iter 2, ch. est.
- \*- Iter 3, ch. est.
- Iter 4, ch. est.